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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,797

05/12/2006

Georg Saecker

1-17210

3337

1678 7590 06/28/2010  
MARSHALL & MELHORN, LLC  
FOUR SEAGATE - EIGHTH FLOOR  
TOLEDO, OH 43604

EXAMINER

WU, IVES J

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

06/28/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,797	<b>Applicant(s)</b> SAECKER ET AL.	
	<b>Examiner</b> IVES WU	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

(1). Applicants' Remarks filed on 4/27/2010 has been received.

Claims 1-3 were cancelled before.

The rejection of claims 4-5 in prior Office Action dated 1/27/2010 is sustained.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(2). **Claims 4, 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hegarty (US 4254094) in view of Peterman et al (US 4155987), Fenton et al (US 4206194) for the same rationale recited in prior Office Action dated 1/27/2010.

### ***Response to Arguments***

(3). Applicant's arguments filed on 4/27/2010 have been fully considered but they are not persuasive.

For the argument regarding that column 24 of Hegarty (US 4254094) is used to remove traces of H<sub>2</sub>S under essentially the same pressure conditions as found in 1<sup>st</sup> absorption column 10. Columns 10 and 24 are arranged in series in the main gas line. It is not possible to enrich H<sub>2</sub>S in the solution that is drained from column 24 as achievable concentration is so low that the solution drained from column 24 could not be used to absorb H<sub>2</sub>S in the 1<sup>st</sup> column 10. Thus column 24 of the Hegarty reference cannot be considered to act as an enrichment column (¶5, ln.2 - ¶1, ln.1-4).

However, claim 4 recites: H<sub>2</sub>S enrichment, 2<sup>nd</sup> H<sub>2</sub> S absorber 24 would read on because it absorbs H<sub>2</sub>S. Applicants do not provide quantity as measurement for the definition of "enrichment".

For the argument regarding that stripper 41 of Hegarty (US 4252094) works at a lower pressure than preceding flash drum 17. However, while this figure does not show a pump it there certainly is no indication that one is not present. Often pumps and valves are eliminated from

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these types of drawings to focus on the main equipment with enough additional information to show flow direction. Additionally, the pressure is affected by the relative heights and positions of equipment as well. This simple flowsheet thus cannot confirm that such conveying equipment is not present, and it is not possible from this sheet to assume certain pressure levels for the liquids (§2, page 5, Remarks).

However, the disclosure of prior art Hegarty (US 4252094) is the content which Hegarty (US 4254094) teaches. Based on the teaching (including Figures) of prior art Hegarty (US 4254094), it meets the limitations of instant claim. *Mere Counsel's arguments unsupported by factual evidence are given little weight. In re Lindner, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972).*

For the arguments regarding the combined art - Peterman et al (US 4155987) in which hydrated tail gas is conveyed to a H<sub>2</sub>S absorber after passing through a cooling zone. After passing through the absorber the gas is released to the atmosphere...The examiner states that it would be obvious to have compression in the Claus unit for tail gas delivery, but it is respectfully submitted that one skilled in the art would have no reason to assume that a delivery to the atmosphere would need to be subject to compression. This would be extremely counterintuitive to one skilled in the art. Therefore, it is respectfully submitted that this feature is also nonobvious in view of the art of record (§2, page 6, Remarks).

However, the 1<sup>st</sup> H<sub>2</sub>S absorber of Hegarty (US 4254094) is to absorb the H<sub>2</sub>S contained feed gas at 674 *psia* (Col. 6, ln. 26), In combining with teaching of Hegarty (US 4254094), it would be obvious to have a compressor to increase the pressure of released gas from cooling zone in order to feed into the 1<sup>st</sup> H<sub>2</sub>S absorber of Hegarty (US 4254094), the H<sub>2</sub>S absorber of Peterman et al (US 4155987) is not specifically detailed, to vent the gas is just one embodiment. Therefore, the combining is applicable.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVES WU whose telephone number is (571)272-4245. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner: Ives Wu

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Date: June 23, 2010

/Duane Smith/

Supervisory Patent Examiner, Art Unit 1797